

Amendments to Claims:

Claims 1-14. (cancelled)

Claim 15. (cancelled)

Claim 16. (currently amended) The heat exchanger of claim ~~15~~
22 wherein the webs extend continuously over a width of the
substrate.

Claim 17. (currently amended) The heat exchanger of claim ~~15~~
22 wherein the webs are arranged directly in front of the
channels in the flow direction.

Claim 18. (previously presented) The heat exchanger of claim
16 wherein the webs are arranged directly in front of the
channels in the flow direction.

Claim 19. (currently amended) The heat exchanger of claim ~~15~~
22 wherein the channels have a rectangular shape with adjacent
sides of unequal length with a longer side oriented parallel to
the flow direction.

Claim 20. (previously presented) The heat exchanger of claim
17 wherein the channels have a rectangular shape with adjacent
sides of unequal length with a longer side oriented parallel to
the flow direction.

Claim 21. (cancelled)

Claim 22. (currently amended) ~~The heat exchanger of claim 21~~
A heat exchanger comprising:

a substrate that comprises a bottom side and a top side;
a unit for generating a directed fluid stream with a flow
direction that is tangential to the bottom side and to the top
side of substrate;

webs projecting from the top side of substrate and
perpendicular to the flow direction, lying one after the other in
the flow direction, wherein a height of the webs is less than a
spacing of adjacent webs in the flow direction; and

a plurality of regularly arranged channels extending through
the substrate;

wherein the substrate is placed via spacers on an object and
a height of the spacers is greater than the height of the webs;
and

wherein the height of the spacers is less than a length of
the channels in the flow direction.

Claim 23. (cancelled)

Claim 24. (previously presented) The heat exchanger of claim
22 wherein the spacers project between the channels from the
bottom side of the substrate and extend over the length of
substrate to form longitudinal channels.

Claim 25. (canceled)

Claim 26. (previously presented) The heat exchanger of claim
22 wherein the spacers consist of thermally conductive material.

Claim 27. (cancelled)

Claim 28. (currently amended) The heat exchanger of claim ~~15~~
22 wherein the substrate consists of metal.

Claim 29. (currently amended) The heat exchanger of claim ~~15~~
22 wherein the substrate consists of a material which is coated
with thermally conductive material.

Claim 30. (currently amended) The heat exchanger of claim ~~15~~
22 further comprising a guide plate arranged at an inflow side
of the substrate.

Claim 31. (currently amended) ~~The heat exchanger of claim 15~~
A heat exchanger comprising:
a substrate that comprises a bottom side and a top side;
a unit for generating a directed fluid stream with a flow
direction that is tangential to the bottom side and to the top
side of substrate;
webs projecting from the top side of substrate and
perpendicular to the flow direction, lying one after the other in
the flow direction, wherein a height of the webs is less than a
spacing of adjacent webs in the flow direction; and
a plurality of regularly arranged channels extending through
the substrate;
wherein a cover plate is arranged a distance away from the
top side of substrate, wherein a spacing of the cover plate from
the top side of the substrate is at least twice the height of the
webs.

Claim 32. (currently amended) The heat exchanger of claim ~~32~~
31 wherein a side of the cover plate facing the top side of the
substrate comprises cover plate webs that correspond to the webs
on the top side of the substrate, wherein the cover plate webs
are obstacles to flow.

Claim 33. (currently amended) The heat exchanger of claim ~~15~~
22 wherein several heat exchangers are modularly arranged in an

arrangement selected from the group of arrangements consisting of side-by-side, one above the other, and one behind the other.

Claim 34. (currently amended) The heat exchanger of claim ~~15~~
22 wherein guide plates are arranged such that a fluid stream arriving perpendicular to the direction of flow is deflected.